



# Green Suppliers Network

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An Innovative Industry-Government  
Collaboration



**Green Suppliers Network**



A program of the  
U.S. Dept of  
Commerce

# Green Suppliers Network in a Nutshell

- Green Suppliers Network provides Lean & Clean technical assistance to small and mid-sized manufacturers yielding improved competitiveness through environmental and economic benefits
- Lean & Clean approach expands the traditional Lean definition of waste from eliminating non-value added time, labor, money to include environmental wastes (energy, emissions)
- This dual approach aligns large manufacturer, supplier and government interests



# Lean & Clean Approach

## Clean Strives For...

- **N**ature-friendly Substitutes
- **O**ptimized Material And Energy Efficiency
- **W**aste Elimination
- **A**ir/Water Emission Reductions
- **S**olid/ Hazardous Waste Reduction
- **T**oxic Material Reduction Or Substitution
- **E**fficient Packaging

## Lean Eliminates...

- **D**efects
- **O**verproduction
- **W**aiting
- **N**on-utilized People
- **T**ransportation
- **I**nventory
- **M**otion
- **E**xtra processing

# Program Attributes

- Industry-government collaboration
- Lean & environmental technical assistance
- Original equipment manufacturer (OEM) drives involvement through supply chain
- Green Suppliers partners with state & regional entities to assemble the best technical resources
- Quantifiable environmental & economic metrics
- Cost savings remain with suppliers
- OEMs review specifications hindering environmental improvements
- Voluntary pollution prevention initiative
  - Not associated with compliance, unless compliance assistance is requested

# Responds to Industry Needs

- The Green Suppliers Network Can Help You By:
  - Providing technical assistance to your suppliers and your facilities
  - Identifying cost savings opportunities
  - Improving supply chain health
  - Providing aggregated environmental performance information about lower tier suppliers
  - Increasing dialogue between you and your suppliers
  - Assisting on potential image and brand issues

# Key Players and Roles

- US Environmental Protection Agency
  - Operates and funds the Green Suppliers Network program
- NIST Manufacturing Extension Partnership (MEP)
  - Provides national coordination
  - Certified MEP centers conduct technical reviews
- State Pollution Prevention (P2) Technical Assistance Providers (TAPs)
  - Assist in reviews and provide environmental expertise
- Original Equipment Manufacturers (OEMs)
  - Facilitate supplier engagement
  - Review product specifications as needed
- Suppliers
  - Participate and implement

# The Green Suppliers Network: How It Works

**Step 1.** EPA engages one or multiple OEMs.

**Step 2.** OEM solicits supplier participation.

**Step 3.** EPA engages NIST MEP and State P2 practitioners to provide Lean and Clean technical assistance to supplier as the Green Suppliers Network review team.

**Step 4.** The Green Suppliers review team works with supplier facility to identify, prioritize and implement solutions that achieve business and environmental results. (3-4 days)

**Step 5.** NIST MEP writes and submits a final report with input from the State P2 practitioners. (3-4 weeks)

**Step 6.** Green Suppliers review team works with facility to act on opportunities.

**Step 7.** Data are converted to metrics, aggregated and stored at each MEP center. \*

\*Company information is not subject to the Freedom of Information Act (FoIA)

# Current Sector Activity

- Healthcare/Pharmaceutical
  - Abbott Labs, Baxter Healthcare, Bristol-Myers Squibb, Eli Lilly, GlaxoSmithKline, Johnson & Johnson, Pfizer, Roche and Wyeth
- Automotive (Suppliers' Partnership for the Environment)
  - DaimlerChrysler, General Motors and 28 suppliers
- Office Furniture
  - Haworth, Herman Miller, HNI/AllSteel, Kimball, Light Corp, Steelcase
- Aerospace
  - Lockheed-Martin, Northrop Grumman, Pratt & Whitney, Raytheon, Rockwell Collins, United Technologies Corporation
- Farm and Construction
  - John Deere
- AMTRAK



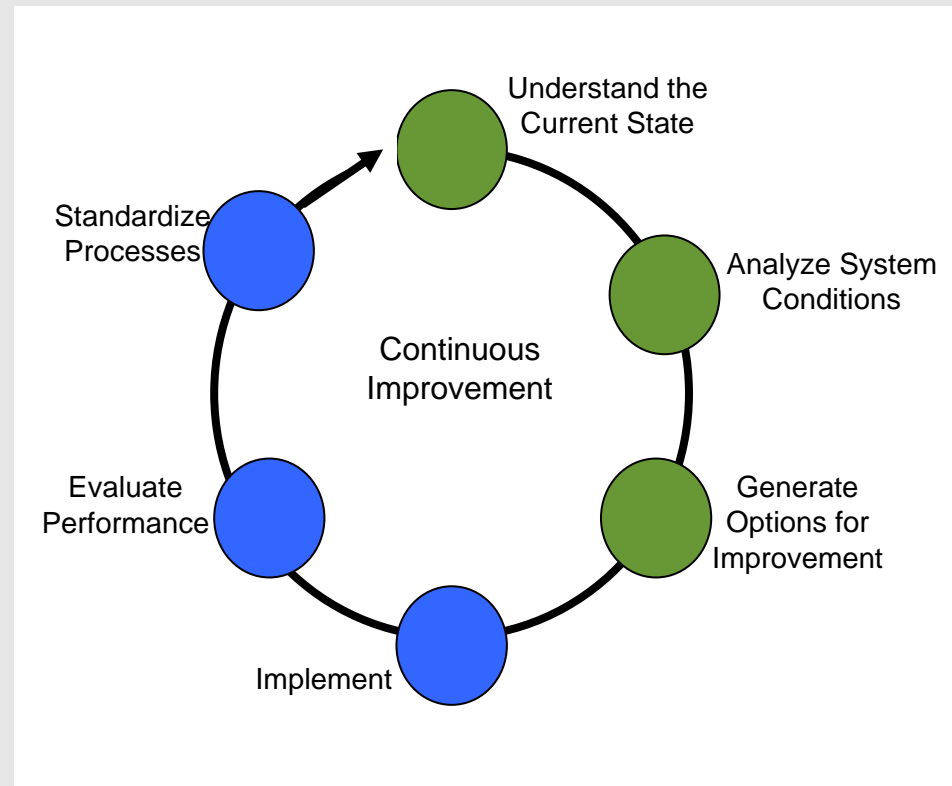
# Results

Potential savings identified during 20 Green Suppliers Network Reviews:

<b>Cost Savings from Environmental Impact Opportunities</b>	<b>\$2,516,663/yr</b>
Energy Conservation (MM BTUs)	219,552
Water Conservation (Gallons)	8,842,459
CO2 Emission Reduction (lbs)	79,000
Solid Waste Reduction (lbs)	279,669
<b>Cost Savings from Lean Opportunities</b>	<b>\$7,017,096/yr</b>
Cost Savings from Other Opportunities	\$132,053/yr
<b>Total Potential Cost Savings</b>	<b>\$9,665,812/yr</b>
<b>Cost Savings from One-time Lean Opportunities</b>	<b>\$4,523,770</b>

# What is a Green Suppliers Network Review?

- Green Suppliers Network reviews address the first three steps of continuous improvement



# The Review Process

- Understanding The Current State
  - Identify project focus and select assessment team
  - Perform financial and operational assessment
  - Evaluate organizational change potential & benchmark cost savings
  - “Walk the floor” with company representatives
  - Conduct on-site training of value stream mapping
  - Value stream and process maps the current state
- Analyze System Conditions
  - Identify waste sources
  - Gather data to support options
  - Conduct root cause analysis

# The Review Process (cont.)

- Consider Options For Improvement
  - Create future state value stream and process maps
  - Prioritize continuous improvement list with responsibilities and timelines
  - Present opportunities and perform cost benefit analysis
  - Prioritize implementation recommendations
  - Conduct follow-up survey to assess impacts
- Implement Changes
  - Evaluate cost benefit analysis
  - Green Suppliers Network provides access to implementation support
    - \$1,000 credit toward implementation assistance\*

\* Work must be coordinated through MEP center within 3 months of facility review

# Review Specifics

- Cost
  - \$7,000 Cost of review
  - \$2,500 U.S. EPA program discount\*
  - \$4,500 Total cost to supplier for Green Suppliers review
- Supplier benefits often exceed 3:1 ROI
- Reviews offered first come, first served
- Reviews focus on single process
- On-site reviews take 3-4 days
- Reports generated in 3-4 weeks
- Technical assistance providers & supplier representatives disclosed before review

\*Suppliers Must Qualify Under SBA Definitions

# Review Specifics

- Why OEMs Have Selected Suppliers To Participate?
  - Product lines
  - Financial issues
  - Environmental challenges
  - Likelihood to participate
  - OEM-defined goals
    - For example, may select minority-owned suppliers to work toward diversity goals

# Review Specifics

- OEM Contributes
  - Time and staff resources to foster supplier participation
    - OEMs should involve EHS, purchasing and operations
  - Willingness to look at product specifications hindering environmental and cost improvements
  - Input on sector-specific needs
- OEM Receives
  - Green Suppliers Network promotional materials (letters, brochures)
  - Supplier coordination
  - Suppliers and OEM web casts
  - Aggregated results after fifth review is completed

# Summary

- The Green Suppliers Network improves environmental & business performance
- Green Suppliers provides local expertise for follow-up implementation assistance
- Data collection enables OEMs to see aggregated progress
  - OEMs & EPA view aggregated results only
  - Data collected & managed by MEP centers
- Green Suppliers works with all OEMs to help their suppliers achieve cost savings, eliminate waste & improve competitiveness





## Questions?

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